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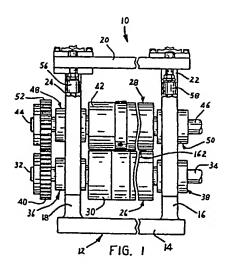
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64 Apertured nonwoven web.

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(57) An apertured, autogenously bonded fibrous web substrate. A nonwoven web contains apertures with a consolidated or densified area surrounding each of the apertures to attract fluid and allow easy passage thereof through the nonwoven web. A novel sanitary napkin containing this perforated nonwoven web cover maintains a cloth-like texture and feel while remaining cleaner and drier during use. Rotary, aperturing apparatus of the present invention performs the process necessary to achieve the desired characteristics in the nonwoven web.





## **EUROPEAN SEARCH REPORT**

Application number

EP 86 11 2175

DOCUMENTS CONSIDERED TO BE RELEVANT							
Category	Citation of document with indication, where appropriate, of relevant passages		opriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. CI.4)		
х	EP-A-0 080 383 ( * page 1, lines lines 1-22; page page 15, lines 6 10-14 *	1-5; page 13, lines	e 11, 15~17;	1-5,11 ,18		F 13/18 F 13/16	
A				6-8,12 -17,19 -22			
х	FR-A-1 534 042 * lines 5-13, 2 figures 1, 2 *			1	•	-	
x	GB-A-2 114 445 (KIMBERLY- * page 2, lines 6-21, 42- 3, lines 48-49, 64 - page			1-3,7			
		64 - page 4	4, line		TECHNICAL FIELDS SEARCHED (Int. CI.4)		
A	1; claims 1, 3, 4, 11; figures 2 *		res 1,	4-6,8	A 61 D 04 A 41	F 13/00 H 3/00 B 13/00	
A	GB-A-2 103 933 NEPHEW)  * page 1, lin lines 11-29; cl figures 4, 5 *	es 37-72; p		1-3,5- 8,11, 18,19			
			/-				
The present search report has been drawn up for all claims							
Place of search BERLIN Date of completion of the search 07-07-1987			MONNE E.M.B.				
X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure  E: 6  X: particularly relevant if taken alone  A: technological background A: technological background A: technological background A: technological background			E: earlier pate after the fill D: document L: document	: theory or principle underlying the invention : earlier patent document, but published on, or after the filing date ): document cited in the application : document cited for other reasons  A: member of the same patent family, corresponding document			



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	DOCUMENTS CONS	Page 2			
ategory		Ith indication, where appropria vant passages	te,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. CI.4)
A	US-A-3 965 906 (COLGATE-PALMOLI * column 3, 1: 5, lines 31-51; 9, 10; figures 1	ines 45-65; co claims 1, 2,	lumn	11,18	
A	US-A-3 403 681 * column 2, line line 9; column claim 1; figures	e 62 - column n 4, lines 30	3,	11,18	
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<del></del>	CATEGORY OF CITED DOCK	JMENTS T:1	heory or princ	iple underly	E.M.B.
r: pai do	rticularly relevant if taken alone rticularly relevant if combined w cument of the same category hnological background n-written disclosure	rith another D: 6 L: 6	ifter the filing locument cite locument cite	date d in the app d for other r	lication easons
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